To: Director and Laboratory Staff

From: Survey and Appraisal Section, Cotton Processing Division

Subject: SURVEY NOTES

FARM SITUATION

Because of prospects for improved world crop production, the value of agricultural exports from this country may be 15 to 20 percent below the 1947 record, with a large part of the reduction in grains and grain products. Domestic crop production at the 1947 level and improved production abroad would be reflected in some decline in prices of farm products from present levels, but they would still average appreciably above 1946. Cash receipts from farm marketings are not likely to be reduced by more than 5-10 percent below last year's record. Net income of farm operators may be reduced somewhat more because of higher production costs.

Demand and Price Situation, BAE, April 18, 1948.

LINTCOTTON

PRICE OF COTTON INCREASES; MILL MARGINS DECLINE.

The price of cotton has climbed more than 4 cents since February as a result of (1) the Marshall Plan, (2) national preparedness moves, (3) heavy domestic consumption. Mill margins for print cloths dropped very substantially from February to March, indicating that the boom in this type of fabric may be subsiding.

Table 1.- Prices of raw cotton, rayon staple, and cotton fabrics, and cotton mill margins in cents

The state of the s	il 15: 948 :		: :February : : 1948	7045	Average
Cotton, Middling 15/16" : delivered at mills, lb: 3 Rayon, viscose staple, :	8.52:	35,36	34,02	36.55	23.76
equivalent price 1/, lb: 3 Cotton fabrics, average :	2.04	32.04	32.04	28.48	22.25
17 constructions2/ Mill Margins 3/	:	87,11		88.19	43.21
Average, 6 printcloths:	:	52.98	: 86.58	78.69	22.65
1 1 1 3 1	- 1	43.68 38.24 32.41	: 38.35	44.36 : 33.81 : 30.07 :	17.37

^{1/} Cost to mill of same amount of usable fiber as supplied by one pound of cotton (rayon price x.89).

^{2/} Price of approximate quantity of cloth obtainable from a pound of cotton with adjustments for saleable wastes. (Cotton Branch, P.M.A.).

^{3/} Difference between cloth prices and prices (10-market average) of cotton assumed to be used in each kind of cloth. (Cotton Branch, P.M.A.).

COTTON CONSUMPTION IN CREASES.

Cotton consumption during March was much higher than in February and for the first time in nearly a year was higher than a year ago.

Table 2.- Cotton consumption and stocks, and spindle hours in cotton mills

To outer add antisousous go	March 1948	February	January: 1948	March : 1947
Consumption bales	878.714	785,231	: 860,202	: 875.124
On hand, 1000 bales	5,963		: 7,339	
Active spindle hours, billions: Spindle activity, percent of:	altyr bluon	9.8	: 10.8	: 10.0
80-hour capacity :	ten no enti-	137.6	: 139.0	: 131,6

GRADE UP, STAPLE LENGTH SHORTER IN 1947 CROP.

The grade index of the 1947 cotton crop was 96.9 (Middling white equals 100) as compared with 94.6 in 1946, and was the highest since 1939, thanks to generally favorable weather for harvesting. The average staple length was 31.7 thirty-seconds of an inch as compared with 32.6 in 1946, because of dry weather during July and August in much of the Mississippi Valley area and sharply increased production in western Oklahoma and northwest Texas. There was a drop of 43 percent from 1946 to 1947 in the supply (carry over plus crop) of cotton of 1-1/8" and longer in staple; a drop only of 9 percent in 29/32" and shorter cotton.

United States Quality Report for Ginnings 1947 Crop, P.M.A.

THREE PERCENT OF COTTON ACREAGE MECHANICALLY PICKED IN 1947.

Only 3% of the total cotton acreage was mechanically picked in 1947, with 125,000 bales harvested by mechanical strippers in Oklahoma and Texas and 75,000 bales by mechanical pickers in the Mississippi Delta. Labor time to turn out a crop has been reduced to as low as 20 hours per acre in the coastal plains of North Carolina as compared with present average of 118 hours; to 23 hours against 141 hours in Mississippi Delta; and to 7 hours against 22 hours on the Texas plains. Deere & Co. is making between 7,000 and 8,000 strippers per year. They also are made in many small plants and blacksmith shops in the Southwest.

Clifton Kirkpatrick, N.C.C. before Texas Cotton Ginners Assen., Wall Street Journal, April 3,1948 p 3.

TEXAS FIRM TO MAKE 500-600 PICKERS in 1948.

About 500 or 600 cotton picking machines of a new type will be manufactured in Texas during 1948 by the Cotton Harvester Co. of Dallas. W. A. Russell, company vice-president, recently said the new machine, the Champion, has gone into production at Tyler. Five former war plants have been put to that use, and Russell predicted that if materials were available several thousand machines would be manufactured in 1949.

Cotton Trade Journal, Mar. 26, 1948, page 5.

COTTON COMPRISES 82 PERCENT OF OUR TOTAL DOMESTIC PRODUCTION OF TEXTILE FIBERS.

Production of textile fibers in the United States in 1947 was equal to the average per year during 1935-39 but with rayon production more than three times as great and with cotton production somewhat lower. (Table 3). Cotton comprises 82 percent of our total domestic production of textile fibers. This situation is highly significant from a military preparedness viewpoint.

Table 3.- Production of Domestic Fibers, United States, 1940-47

Year 1/	:Cotton		Mohair		Synthetic	: Flax	Hemp	: Total
	1 1 1	1.			: Fibers	:		:
	:Million:	Million:	Million	Million	: Million	:Million	Million	:Million
	:pounds :	pounds :	pounds :	pounds	: pounds	:pounds	pounds	:pounds
Averages	.:				:	:	:	:
1935-39	:6,284.0:	228.8	13.9	312.0	-	: 1.0	: 1.0	:6,840.7
1940-44	:5,715.5:	238.5 :	17.3	612.8	: 24.9	: 4.1	: 43.1	:6,656,2
1945	:4,309.6:	210.0	18.3	792.1	: 49.3	: 2.4	6.8	:5,388.5
1946	:4,147.2:	186.0	16.0	853.9	53.3	: 2.9	4.5	:5,263.8
1947	:5,613.1:	167.6 :	15.3	975.1	: 58.0	: 2.6	: 4.0	:6,835.7
	:Percent:	Percent:	Percent:	Percent	: Percent	:Percent	Percent	:Percent
Averages	:				:	•	:	:
1935-39	: 91.9:	3.3	.2	4.6		: 6/	: 6/	: 100.0
1940-44		3.6	.3	9.2	. 4	: .1	: .6	: 100.0
1945	: 80.0:	3.9	.3	14.7	9	: .1	: .1	: 100.0
1946 7/	: 78.8:	3.5	3	16.2	: 1.0	: .1	.1	: 100.0
1947	: 82.1:	2.5	.2	14.3	. 8	: 6/	.1	: 100.0
	:					:	PARTY.	:

^{1/} Calendar years except cotton, which is given for crop years.

COTTON TEXTILE INDUSTRY

DRAPER LOOM OUTPUT INCREASES.

Draper Corporation shipped 50% more looms and 20% more repair parts in 1947 than in 1946, earning \$2,307,729. Prospects for increased earnings in 1948 "appear bright."

Daily News Record, April 17, 1948. p. 1.

^{2/} Data from Bureau of Census.
3/ Data from Bureau of Agricultural Economics.

^{4/} Data from Rayon Organon.

Combined total of nylon, Saran, Vinyon, Aralac, and Fiberglass, as given to us by producers. Production before 1940 was inconsequential. 6/ Less than .05 percent.

^{7/} Preliminary.

COTTON PRODUCTS

RAYON TIRE FABRICS MUCH LOWER IN PRICE THAN COTTON TIRE FABRICS.

Comparative prices of cotton and rayon tire cord fabrics are given in Table 4. The comparison is made on prices paid by independent rubber companies for the constructions they use most heavily. Prices per square yard are said to afford a "substantially correct" way of comparing cotton and rayon fabric quotations, since approximately the same number of yards of each are used per tire. As indicated, rayon fabric is 31% cheaper than cotton fabric for passenger car tires, and 18% or 43% cheaper for truck tires, depending on the rayon fabric used.

Table 4.- Comparative prices of cotton and rayon tire cord fabrics

Fabric	Cord	Fabric : weight : per sq. : yard :	Price : per pound :	
		: Pounds :	<u> Cents</u>	Cents
Passenger car tires : Cotton fabric: Rayon fabric:	12/4/2	.86	.76 67	65 45
Cotton fabric: Rayon fabric: Rayon fabric:	1100/2		. 76 69 . 65	65 37 53

Based on reports from independent rubber companies for fabric constructions most heavily used.

TIRE CORD PRODUCTION UP IN FOURTH QUARTER.

Production of both cotton and rayon tire fabric increased from the third to the fourth quarter, 1947. Cotton's percentage of the total has been as follows:

1943	******	83.9%	1947	60.1%
1945		53.0%	lst. qtr	61.9%
	******		2nd. gtr	63.9%
			3rd. qtr	56.3%
			4th gtr	

Table 5.- Production of tire fabric, United States, 1943-47 (In thousands of pounds)

Cotton			on and nylon
Year :	Tire cord: Chafer &: Tire cord: fabric :all other; not woven : fabric : woven :	: ::other : ::fabris: w	not : Total : Total
1944 : 1945 : 1946 : 1947 :	155,932 : 44,954 : 64,357 : 160,818 : 52,889 : 63,365 : 161,501 : 74,363 : 74,689 : 195,946 : 70,653 : 79,217 : 21,815 : 21,972 : 53,746 : 16,4802/: 23,491 : 44,291 : 14,5962/: 15,571	239,376: 41,25% 265,243: 94,96% 277,072:170,594:1 310,553: 212,2 345,816:206,216:2 93,164: 52,059 93,717: 47,360 74,458: 51,719 84,477: 55,078	4,843 : 46,100 :285,476 7,267 :102,228 :367,471 11,339 :181,933/:459,005 200 :212,200 :522,753 23,519 :229,735 :575,551 5,322 :57,381 :150,545 5,486 :52,846 :146,563

^{1/} Including small quantity of rayon fuel cell fabrics.
2/ Approximately 30 percent of this item was estimated.
Compiled from Facts for Industry, Bureau of the Census.

TIRE COMPANIES BEGIN TO PRODUCE LOWER LINE TIRES.

Goodyear is now "rolling out" second and third line tires, Goodrich has also announced a new lower priced tire, and Firestone and U. S. kubber are expected to follow soon. Market for first line/higher casings is now flooded. A second line tire has reclaim rubber (which sells for 8 cents per pound against 18.5 cents for synthetic and 22 cents for natural rubber) and cord fabric used is lighter weight. In the case of third line there's even more reclaim rubber and even less costly fabric used. In 1940, tires were made about as follows: Premium, 3%; first line, 27%; second line 31%; third line, 21%; fourth and fifth lines, about 18%. Speaking of lower grade tires, one tire company technical man says: "In the last analysis everybody loses- the company, the dealer, and the customer. But in the rubber business competition forces you to do some funny things."

Wall Street Journal, April 13, 1948, p. 1.

Lee Rubber & Tire Co., was to reduce price of its "de luxe" tires on April 12th, with the 6.00 x 16 size dropping from \$15.25 to \$12.95 plus tax.

Journal of Commerce, April 10, 1948, p. 1.

FIBER BONDING REPORTED BEING TRIED FOR TIRE CORD

According to trade reports, Dan River wills has been working with the "big four" rubber companies, and some smaller concerns also, to adapt their "Fiber Bonded" process to yarns of cotton, rayon, or nylon."
"The combination resin and stretching under tension, ie is said, increases the tensile strength, reduces stretch and gives a greater yield of yarn. The fiber bonding increases the fatigue resistance in the tire and one source maintains it will double the lives of tires." It is reported that road tests have been conducted with cord of all three types with following incomplete results: (1)"It almost makes cotton perform like rayon," said one firm. Another report on the cotton cord was that "good results have been obtained on a limited number of road tests." (2) On rayon, one tire firm reported it gives better adhesion. A rayon yarn producer said, "some encouraging results have been obtained on rayon." (3) On nylon, it is said to reduce residual stretch and to arrest cord separation and growth of the nylon cord tires.

Daily New Record, march 26, 1948, p. 1.

COTTON GAINS IN WOMEN'S APPAREL.

According to the National Cotton Council, cotton has gained while synthetics and other fibers have declined "in virtually every women's apparel field," comparing the first half of 1946 and 1947. (The "new look" plus the return to manufacture of peacetime goods may be considered as reasons for this development).

Textile Age, March 1948, p 14.

NYLON USE IN WOVEN GOODS REPORTED

nylon

Production of 100%/broad woven fabrics in 1947 totaled 20,573,000 linear yards as compared with 21,539,000 linear yards in 1946. A total of 3,494,000 pounds of nylon was required for this purpose in 1947 as compared with 4,572,000 pounds in 1946.

Facts for Industry, Rayon Broad Woven Joods, April 16, 1948

COMPETITIVE MATERIALS

NEW VISCOSE RAYON PLANTS ANNOUNCED.

A 20-million dollar, rayon plant with a capacity of 10 million pounds of continuous viscose yarn will be built by the American Development Company, a subsidiary of Beaunit Mills on a 300-acre tract of land on the Childersbourg, Ala., Ordnance Works reservation. The company will employ about 2,500 workers and will pay \$54,000 a year for land and for electric and steam power generated at power plant No. 2 of the wartime ordnance works. Daniels Construction Co. has the construction contract. Beaunit already operates Skenandoa Rayon Corp. at Utica, New York, which has an estimated capacity of about 12 million pounds per year.

Daily News Record, march 30, 1948, p. 1.

United Rayon Corp. has been organized by the Oscar Kohorn group to build a plant with an annual capacity of 4 million pounds of viscose filament rayon, and 8 million pounds of viscose staple fiber. A sale of 9,950 shares at \$1,000 each, each share entitling purchaser to a part of the plant's production, is proposed. Plant site has not been selected.

Daily News Record, Mar. 30, 1948, p 27.

Mar. 31, 1948, p.31.

DUPONT BUYS IAND FOR NEW PLANT.

DuPont has taken an option to purchase 800 acres on the Wateree River near Camden, S. C., about 23 miles north of Columbia, for its rayon department. Plans are indefinite and it is not known whether facilities for viscose, acetate. or nylon are contemplated.

Daily New Record, April 9, 1948, p. 29 .

U. S. RUBBER DEVELORS NYLON-REINFORCED BELTS.

A nylon-reinforced V-belt claimed to have twice the strength and four times the average life of conventional V-belts has been developed by United States Rubber Company. The belt contains a series of nylon cords covered with a special synthetic rubber compound capable of withstanding the deteriorating effects of oil and heat.

Journal of Commerce, Mar. 31, 1948, p. 17.

AMERICAN VISCOSE BEGINS PRODUCING POLYETHYLENE MONOFILAMENTS.

Experimental extrusion of polyethylene monofilaments from polyethylene, understood to come from Carbide & Carbon and DuPont, has been started by American Viscose Corp. Possibilites for commercial production have not been determined by the company. The monofilaments are reported to have high extensibility and low specific gravity.

Daily News Record. April 1, 1948, p. 23.

GOVERNMENT WOOL RESEARCH REVIEWED

Government wool research now covers nearly every phase of the industry, but industry spokesmen contend the wool research dollar has been stretched mighty thin and there is a need for a lot more Jovernment-sponsored research. There are some RMA wool projects but the Wool Advisory Committee "has never been informed exactly how much money is being alloted to them." RMA projects for 1949 deal with modification and improvement in wool fibers; economic studies of wool production, processing and marketing; standardizing types of domestic shorn wools; the wool price-supply picture; improvements in consumption data and the general-economics of marketing wool. Highest priority project should be a study to determine nation's future peacetime and wartime recuirements and ways to improve competitive status of domestic wool.

The BAI has conducted numerous experiments to crossbreed kambouillet sheep (essentially wool producer) with Lincoln rams to get the Columbia sheep, a big animal with heavy fleeces, demonstrating that satisfactory mutton and satisfactory wool are not antagonistic. The P.M.A. has a new Denver Laboratory which until now has concentrated on core testing, skirting, and sorting but will begin work in several months on wool scouring. Army and Navy are mostly interested in end-use research with particular attention to (1) nylon-wool blends, (2) extension of shrink-resistant processes to items other than socks and also to textile finishing problems, mildew resistance, fire resistance, etc. The wool laboratory of the Wyoming Experiment Station concentrates on production problems but attention has been given to core sample methods, and to price studies.

Daily News Record, March 29, 1948, pages 36-37.

RAMIE MILLS OF FLORIDA REPORTS DEFICIT

Ramie Mills of Florida, Inc., have reported a deficit of \$118,470 for the year ended January 31, 1948, compared with another deficit of \$72,101 in the previous fiscal year. President Richard Whitney has stated that the company needs additional funds and because of lack of working capital, operations were halted at the end of February, except for a skeleton force. At the end of the fiscal year the company had current assets of \$7,928 and current liabilities of \$92,359. President Whitney owns 37,400 of the original 55,000 shares of Ramie Mills' stock and Treasurer Harold P. Carver and associates, 15,000. In February 1946, an additional 102,000 shares were sold to the public and at the present time, 88,200 shares are being offered to stockholders at \$1 per share.

American Wool and Cotton Reporter, April 8, 1948, p. 39.

TEXTILE RESEARCH

I. T. T. RESEARCH OBJECTIVES DISCUSSED

Dr. Warren F. Busse, new technical director of the Institute of Textile Technology. "expressed feeling" before first annual meeting of Institute Executives that the Instit te's work could most profitably be devoted to finding out and furnishing mills with answers to questions as to what are the properties of materials and processes and WHY they have these properties. Mills could then use this information in solving special problems, being closer to the manufacturing processes. "Many of our present research projects are aimed at answering the question WHAT in regard to (1) physical properties and internal structure of cotton fibers, (2) efficiency of steamcan drying vs. electrical methods, (3) weaving properties of yarns and sizing materials, (4) effects of acids and bases on deterioration of cellulose, (5) colloid properties of starches and adhesives used in industry, (6) thermal stability of cotton and wool, (7) effect of ultrasonic radiations on fiber, (8) rate of take-up of water in toweling materials, (9) methods of measuring crease resistance. Some projects answer HOW including (1) How can moisture be determined more efficiently? (2) How can samples be washed and scoured most effectively? (3) How can materials be handled more effectively? (4) How can inspection be made more accurately? Daily News Record, April 12, 1948, p. 31.

INDIA COTTON COMMITTEE PLANS INCREASED RESEARCH.

The Indian Central Cotton Committee will ask the Government of India to double the cotton cess and to accelerate the tempor of cotton research by granting large funds for establishing research stations in the various cotton tracts. Accelerated research was said to be needed because much of the medium and long staple cotton used passed into Pakistan. Indian Textile Journal, Jan. 1948, p. 313.

ROLE OF CHEMICAL ENGINEERS IN TEXTILE INDUSTRY DISCUSSED.

"A golden opportunity" is seen for chemical engineers in the textile industry because of size of industry; fact that it involves such operations as filtering, piping, heating, blending, etc., that by and large such operations are now practiced by rule of thumb, and fact that chemical engineering grew up while textile industry was in financial doldrums. Chemical engineers could do much for industry but many of industry units are too small to hire them, and many lack appreciation for what they could do. Several suggestions as to where chemical engineers could be helpful in wet processing of textiles are given. Chemical Engineering March 1948,p. 127.

U S D A AUTHORIZES NEW GINNING LABORATORY IN NEW MEXICO.

Construction of a new ginning research laboratory for irrigated cotton at the A. & M. College, State College, New Mexico, has been authorized by the USDA: It will operate as a branch of the ginning laboratory at Stoneville, Mississippi. The main problem of study is the ginning of irrigated cotton particularly as it relates to mechanically harvested cotton. The reasons New Mexico A. & M. College was chosen were (1) the college had conducted " research on irrigated cotton previously (2) had technical and scientific library facilities, (3) service and shop equipment available to research personnel, (4) there will be convenient opportunity for post-graduate study and training in research techniques, (5) the college has offered 5 acres of land for use in research, (6) and adequate housing facilities for research personnel in nearby towns of Mesilla Park and Las Cruces, New Mexico. Journal of Commerce, Mar. 31, '48, p 16.

COTTONSEED AND PEANUTS

PEANUT ACREAGE SLIGHTLY UNDER LAST YEAR.

Prospective acreage of peanuts for 1948 on basis of March 1st reports is 3,988,000 acres, 4 percent less than last year and 787,000 acres below record plantings in 1943.

Crop Production, BAE, March 19, 1948

OIL PRICES RISE SHARPLY.

Prices of domestic edible vegetable oils have increased sharply during the last month. According to the Journal of Commerce (April 8th), the increase was due to heavy government buying, trade anticipation of European Recovery Frogram, and short supplies in some lines. According to the BAE'S Demand and Price Situation (April 8th), the total output in 1947-48 of vegetable oils used mainly in food products probably will be about the same as in 1946-47. A larger percentage of the total, however, was produced last fall and winter than in the same months of 1946-47, with the result that the seasonal decline this spring and summer will be sharper than last year.

Table 6.- Prices of vegetable oils and meals

502 300 2002 and	ota a milita	10 2 medi	in continue	with and the s	Marian Company
and dad in :	mint 15 33		to non prist	AND SERVE	the state of the state of
in Chameala	CON VENTURE DE	1 4 77 42	till junious mis	is briggen	to the leases
To term and to	April :	March	: February :		₹ September
1 TOT MONEY BOOMER .	1948 :	1948	: 1948 :	1947	: 1946 .
STRUCKTON LEGIS	10 MESTS 11		ts per pound		in play man
1/:	April 19:	March 15	: February 16:	tok at Late	Francis of Olivan
OILS :	1 20 27- 20 1	Car Total Total	:		:
Cottonseed oil :	29.0 :	23.5	: 21.0 :	31.8	: 12.5
Peanut oil	29.5 :	23.5	: 21.0 :	30.4	: 13.0
Soybean oil :	25.0 :	21.0	: 19.0 :	27.4	: 11.8
Corn oil :	29.0 :	23.5	: 23.5 :	29.8	: 12.8
Coconut oil 2/:	25.0 :	22.5	: 19.0 :	23.9	: 11.1
Linseed oil $\frac{3}{}$:	29.0 :		: 31.3 :	39.4	: 16.6
. Tung oil $\frac{\pi}{4}$:	25.5 :	26.8	: 26.3 :	36.0	: .39.0
			lars per ton		THE PERSON NAMED IN
MEALS 5/ :	April 17		:		:
Cottonseed meal 6 !	82.00 :	81.15	: 84.00 :	68.50	: 62.75
Peanut meal 7/ :	83.00 :		: 88.60 :	66.85	: 67.25
Soybean meal 8/:	85.50 :	- A 100 m	: 89.00 :	72.15	: 66.00
Coconut meal 9/:	67.00 :		: 91.50 :	82.90	: 59.70
Linseed meal 10/:	82.00 :	83.00	: 84.00 :	60.20	: 59.25
2		00.00		00.00	
	*			-	

^{1/} Crude, tanks, f.o.b. mills except noted. From Oil Paint and Drug Reporter (daily quotations) and from Fats and Oils Situation, BAE (monthly quotations).

^{2/} Crude, tanks, Pacific Coast.

^{3/} Raw, drums, carlots, N. Y.

^{4/} Drums, carlots, N. Y.

^{5/} Bagged, carlots, as given in Feedstuffs (daily quotations) and Feed Situation, BAE (monthly quotations).

^{6/ 41} percent protein, Comphis.

^{7/45} percent protein, S. E. Mills.

^{8/41} percent protein, Chicago.
9/19 percent protein, Los Angeles.

^{10/32} percent protein, Minneapolis, prior to May 1947; 34 percent protein after that date.

SOYBEAN PROTEIN PRICE REDUCED SLIGHTLY.

Drackett's Ortho Protein (soybean protein) was reduced in price from 26-1/2 cents to 24 cents per pound on April 1st. Among its uses are paper coating, wall paper, shotgun shell manufacture, fiber carton manufacture, and texitle sizes.

SWEETPOTATOES

March 1 intentions-to-plant reports indicate sweetpotato planting of 560,100 acres in 1948, 9 percent less than last year. Prospective acreage for 1948 is smaller than the acreage for any year since 1902, and is two-thirds of war time peak in 1943. Sweetpotatoes require much hard labor and in many areas the peak labor requirements come at a time when labor requirements of other cash crops are also heavy. Much of the sweetpotato crop is produced for consumption on farms where grown. With farm income at high levels, farmers are able to purchase other foods and many of them now place less emphasis on the sweetpotato "patch."

Crop Production, BAE, March 19, 1948.

LINTERS AND CELLULOSE

PRICE SPREAD BETWEEN LINTERS PULP AND WOOD PULP MARROWS SLIGHTLY.

The price spread between purified linters and dissolving wood pulp narrowed slightly during March as a result of a slight decline in the price of purified linters and the slight increase in wood pulp prices announced for March 15th.

Table 6.- Average annual prices of purified linters and dissolving wood pulp, 1946-47, and monthly quotations November (1947)- March (1948)

	Ce	ents per pound				
Wood pulp 2/						
	Purified linters	Standard viscose grade	:High-Tenacity : viscose : grade	: Acetate : & cupra : grade		
1946 : 1947 :	9.5	5.6	: 5.8 : 7.4	: 6.2		
1947, November:	13.25	7.10	: 7.55 : 7.90	: 8.20 : 8.60		
1947, December: 1948, January:	13.25	7.45 7.45	: 7.90	: 8.60		
1948, February: 1948, March :	13.00	7.45 7.65	7.90 : 7.8.12	: 8,60 : 8,85		
larch 15:		7.85	8.35	9.10		

^{1/} Weighted averages, 1946-47. Compiled from letters from a producer. F. O. B. pulp plant.

^{2/} Average of average monthly prices, 1946-47. Compiled from Rayon Organon and from letters to us from producer. Wood pulp prices are F.O.B. domestic producing mill, full freight allowed, and 3% transportation tax allowed, December 1, 1947 on; freight equalized with that Atlantic or Gulf port carrying lowest backhaul rate to destination plus 3% of backhaul charges, prior to December 1st.

MISCELLANEOUS

FURFURAL USE IN NYLON DISCUSSED.

DuPont is going to use furfural for nylon because (1) it is now selling at 9-1/2 cents per pound, or less than benzene, (2) benzene may go up in price while furfural isn't likely to, (3) raw materials from which it's made are inexhaustible. At present only about 50 million pounds of furfural are made per year, all by Quaker Oats, but the supply of corn cobs, oat hulls, rice hulls, and cottonseed hulls is enough for 2 or 3 billion pounds. DuPont expects to use about 20 million pounds of furfural per year in manufacture of hexa-methylene diamine for nylon. Other uses include plastics, a germ killing drug called furacin, compounds for dyes; solvents for cosmetics, insecticides, etc., synthetic rubber; for taking impurities out of tree stumps, etc.

Wall Street Journal, April 6, 1948, p. 1.

the grades agreed between partition limited to a control of party

pulps listed. and mountain succession knowness (1747)- auch (1948)